

What is claimed is:

1. A method for implanting a retinal tack comprising the steps:
- holding the retinal tack;
 - applying a vibrating forward and back motion to the retinal tack;
 - forcing the tack into the retina and other materials to be secured and into the back of the eyeball;
 - forcing the tack into the back of the eyeball.
2. The method of claim 1 further comprising the step of originating the vibrating back and forth motion with a piezoelectric crystal.
3. A method for implanting a retinal tack comprising the steps:
- holding the retinal tack;
 - applying a sudden force to the tack;
 - forcing the tack into the retina and other materials to be secured and into the back of the eyeball, in any order;
 - forcing the tack into the back of the eyeball.
4. The method of claim 3 further comprising the step of originating the sudden force from a driven piston.
5. The method of claim 4 further comprising the step of imparting the piston's force directly to the tack.

6. The method of claim 4 further comprising the step of imparting the piston's force indirectly to the tack using a hydraulic fluid contained within a thin tube.

7. An apparatus for implanting a retinal tack comprising:

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- a. means for holding the retinal tack;
 - b. means to vibrate the tack in a forward and back direction;
 - c. means to force the tack into the retina and other material to be secured and into the interior back surface of the eyeball, in any order;
 - d. forcing the tack into the back of the eyeball.
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8. The apparatus of claim 7 further comprising a piezoelectric crystal as a source of vibrating forward and back motion.

9. An apparatus for implanting a retinal tack comprising:

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- a. means for holding tack;
 - b. means for applying a sudden force to the tack;
 - c. means for forcing the tack into the retina and other materials to be secured to the interior back surface of the eyeball, in any order;
 - d. forcing the tack into the back of the eyeball.
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10. The apparatus of claim 9 further comprising a driven piston that supplies the sudden force to the tack.

11. The apparatus of claim 9 further comprising the direct transfer of the piston's sudden force to the tack.

12. The apparatus as in claim 9 further comprising the indirect transfer of the piston's sudden force using hydraulic fluid means.

13. A method for securing a retinal electrode element to the back of the eyeball comprising the steps:

- a. holding and steadying the retinal electrode element;
- 10 b. applying a vibrating forward and back motion to the retinal electrode element;
- c. forcing the electrode element's spike electrodes, real or dummy and into materials to be secured to the back of the eyeball and into the retina, in any order;
- d. forcing the electrode element's spike electrodes, real or dummy, into the back of the eyeball.

14. The method of claim 13 further comprising the step of originating the vibrating back and forth motion with a piezoelectric crystal.

15. A method for securing a retinal electrode element to the back of the eyeball comprising the steps:

- a. holding and steadying the retinal electrode element;
- b. applying a sudden force to the retinal electrode element;
- c. forcing the electrode element's spike electrodes, real or dummy, into the retina and other materials to be secured to the back of the eyeball, in any order;

d. forcing the electrode element's spike electrodes, real or dummy, into the back of the eyeball.

16. The method of claim 15 further comprising the step of originating the sudden
5 force from a driven piston.

17. The method of claim 16 further comprising the step of imparting the piston's
force directly to the retinal electrode element.

10 18. The method of claim 16 further comprising the step of imparting the piston's
force indirectly to the retinal electrode element using a hydraulic fluid contained within
a thin tube.

19. An apparatus for securing a retinal electrode element to the back of the
15 eyeball comprising:

- a. means for holding and steadying the retinal electrode element;
- b. means to vibrate the retinal electrode element in a forward and back direction;
- c. means to force the retinal electrode element's spike electrodes, real or dummy
into the retina and into other material that is to be secured to the interior back surface of
20 the eyeball, in any order;
- d. means to force the retinal electrode element's spike electrodes, real or dummy,
into the back of the eyeball.

20. The apparatus of claim 19 further comprising a piezoelectric crystal as a source of vibrating forward and back motion.

21. An apparatus for securing a retinal electrode element to the back of the eyeball comprising:
- a. means for holding and steadying the retinal electrode element;
 - b. means for applying a sudden force to the retinal electrode element;
 - c. means for forcing the forcing the retinal electrode element's spike electrodes, real or dummy, into the retina and into other materials that are to be secured to the interior back surface of the eyeball, in any order;
 - d. forcing the retinal electrode element's spike electrodes, real or dummy, into the back of the eyeball.

22. The apparatus of claim 21 further comprising a driven piston that supplies the sudden force to the retinal electrode element.

23. The apparatus of claim 21 further comprising the direct transfer of the piston's sudden force to the retinal electrode element.

24. The apparatus as in claim 21 further comprising the indirect transfer of the piston's sudden force using hydraulic fluid means.

25. An apparatus comprising a barb means formed as part of the elongated spike electrode of the retinal electrode element so as to keep the electrode from pulling out of the living tissue in which it is implanted.

5 26. A method comprising the step of forming a barb on a plurality of the elongated spike electrodes of the retinal electrode element so that the electrode will tend to not pull out of the living tissue in which it is embedded.

10 27. An apparatus comprising a barb means formed as part of the elongated spike dummy non-working electrode to keep the dummy, non-working electrode from pulling out of the living tissue in which it is implanted.

15 28. The apparatus of claim 27 further comprising a plurality of dummy non-working electrodes that extend beyond the lengths of the electrodes and anchor the retinal electrode element to the back of the eyeball.

20 29. The apparatus of claim 27 further comprising a plurality of dummy non-working electrodes that extend sufficiently beyond the relevant lengths of the electrodes which are proportioned to the curvature of the retinal and anchor the retinal electrode element to the back of the eyeball.

30. An method comprising the step of forming a barb means as part of the elongated spiked dummy non-working electrode in order to keep the dummy, non-working electrode from pulling out of the living tissue in which it is implanted.

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